DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-7 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunji et al. (US 2002/0144513) in view of Hosokawa et al. (US 6,244,954).

Regarding claims 1 and 7, Gunji et al. teach an indoor unit (100) of an air conditioner (see Fig. 1 and para. 54), the indoor unit having a rear portion (area of base panel 110) configured to be mounted to a vertical indoor wall surface (see para. 3; indoor unit 100 is capable of being mounted to a wall), the indoor unit comprising a ventilation fan (400), a heat exchanger having an approximate V-shape (500, 510, 520) (see Fig. 4 and para. 55) in which refrigerant flows that are connected thereto (para. 62) and which is disposed so as to cover the upper portion

of the ventilation fan (400) (see Fig. 4) and a support unit (120,121) supporting the ventilation fan (400) and the heat exchanger (500, 510, 520) (see Fig. 3 and Fig. 4), the support unit (120,121) including a rear end (area of base panel 110) disposed adjacent the indoor wall surface when the indoor unit is mounted to the indoor wall surface (see para. 3; indoor unit 100 is capable of being mounted to a wall), a bottom surface (area of outlet port 303) extending outwardly relative to the indoor wall surface when the indoor unit is mounted to the indoor wall surface (as illustrated in figure 4, the area of outlet port 303 extends from a wall toward air outlet port 125), an upper surface (fixed grille 210) extending outwardly relative to the indoor wall surface as it extends from the wall and spaced upwardly from the bottom surface (as illustrated in figure 4, fixed grille 210 extends from back surface member 110 toward front end frame 211), and a tongue portion (124) extending upwardly from the upper surface to cover the ventilation fan (see Fig. 4) and an upper casing (220) removably mounted to the support unit (120) to cover the heat exchanger (500, 510, 520) and ventilation fan (400) (para 65 lines 1-9). Additionally, Gunji, et al. teach the tongue portion (124) extending upwardly from the upper surface (side facing toward the ventilation fan) and that is positioned at a height no higher of an apex of the ventilation fan (400) when mounted to the indoor wall surface (see Fig. 3 and Fig. 4 and para 58 lines 1-6) and the support unit (120,121) being configured such that the ventilation fan (400) is rotatably supported on the support unit (see Fig. 3) with the tongue portion (124) adjacent to the rear portion (see Fig. 3 and Fig. 4) and support unit (120,121) lies above the apex of the ventilation fan (400) when mounted to the indoor wall surface (see Fig. 4) and a heat exchanger (500, 510, 520) that is connected to lines (129) in which refrigerant flows are installed (see para. 62) to the support unit (121,124) (see Fig. 3). The recitation of "approximate inverted V-shape

in cross-section" has been interpreted as a plurality of the heat exchangers combined to form a bent shape.

Gunji et al. fail to explicitly teach that the support unit lies entirely below the apex of the ventilation fan and that the support unit and the ventilation fan being further configured such that the apex of the ventilation fan is visible as viewed along the horizontal direction from a rearward side of the tongue portion before installation of the upper casing and the heat exchanger and before mounting the indoor unit to the indoor wall surface.

Hosokawa et al. teach a wall mounted indoor air conditioning unit (see figure 2 and figure shown below) that includes a base panel (back cabinet 3) mounted to a wall (see column 4, lines 4-8), wherein the air conditioning unit includes a support unit (annotated below) for the heat exchanger (illustrated below) and a tongue portion (annotated below), wherein the support unit and tongue portion does not extend to the apex of a fan (B) (illustrated below) enabling viewing of the apex of the fan from the rear absent the base panel (illustrated below).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the air conditioning unit of Gungi et al. to place its tongue portion below the apex of the ventilation fan as taught by Hosokawa et al. in order to collect condensation and to enable maximum heat exchange to the heat exchanger by enabling more air blown by the ventilation fan to contact the heat exchanger, thus improving cooling efficiency.

Regarding claim 2, Gunji et al. teach an indoor unit (100) of the air conditioner wherein the heat exchanger (500, 510, 520) is disposed so as to cover front, upper and rear portions of the ventilation fan (400) (see Fig. 12).

Regarding claim 3, Gunji et al. teach the indoor unit (100) of the air conditioner wherein the heat exchanger (500, 510, 520) is installed on the support unit (121) on which the ventilation fan (400) has already been installed (see Fig. 3 and Fig. 4).

Regarding claim 4, Gunji et al. teach the indoor unit (100) of the air conditioner comprising an electrical component box (140) that accommodates electrical components (see Fig. 12 and para. 56), and which is supported by the support unit (121) so as to be at the height no higher than the apex of the ventilation fan (400) and wherein the electrical component box (140) is installed on the support unit (120) (see Fig. 3 and Fig. 12).

Regarding claim 5, Gunji et al. teach the indoor unit (100) of the air conditioner wherein the ventilation fan (400) has a cylindrical shape (see Fig. 3 and Fig. 4) and is disposed so that a central thereof is horizontal (see Fig. 3) and the indoor unit further comprises a drive device (410) that rotatively drives the ventilation fan (400) and is disposed on the same axis as the ventilation fan (400) (see Fig. 3 and para. 57) wherein the electrical component box (140) is disposed so that the electrical components are lined up in the axial direction with the drive device (410) (see Fig. 3 and para 57).

Regarding claim 6, Gunji et al. teach the indoor unit (100) of the air conditioner further comprising a drive device (410) that rotatively drives the ventilation fan (400) (see Fig. 3 and para. 57) wherein the support unit (121) supports the ventilation fan (400) (see Fig. 3), the

electrical component box (140) and the drive device (410)from below when viewed from the front support unit (120,121) (see Fig. 3 and Fig. 4 and para. 57) and the lower surface of the support unit (120) is formed to be flat (see Fig. 3). It is presumed to be that the ventilation fan (400), electrical component box (140) and drive device (410) all rest atop the support unit (120, 121). The recitation of "flat" is interpreted to be anything that is horizontally level as illustrated in Fig. 3.

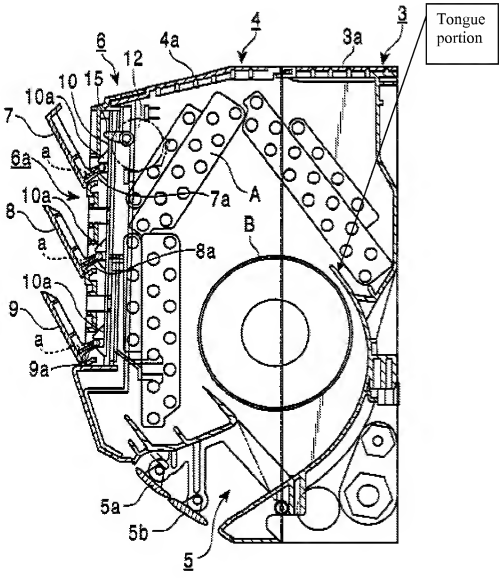
Regarding claim 10, Gunji et al. teach the support unit (121,120) includes a discharge port (125) in communication with the ventilation fan (400) (see Fig. 5 and para 59 lines 1-4).

Regarding claim 11, Gunji et al. teach the upper casing (220) arranged to fit to an upper region of the support unit (121,120) (see Fig. 4 - attached at 128), such a horizontal intersection line between the upper casing and the support unit (see Fig. 4).

Regarding claims 12, 13 and 15, Gunji, et al. teach a rear access opening (125) is formed between the upper surface of the support unit (120) and upper casing when the upper casing is mounted to the support unit to cover the heat exchanger (500, 510, 520) and ventilation fan (400) (see Fig. 4), the indoor unit further comprises a back surface member (300) removably mounted to cover the rear access opening (see Fig. 2).

Regarding claims 14 and 16-17, Gunji et al. teach the back surface member (300) is configured to be installed on an indoor wall surface to support (via the support unit 120 - see Fig. 2).

FIG. 2



Response to Arguments

4. Applicant's arguments with respect to claims 1-7 and 10-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIM RAHIM whose telephone number is (571) 270-1998. The examiner can normally be reached on Monday - Thursday 7am - 3pm EST and Friday 7am - 9:30am EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on 571-272-6681 or Cheryl Tyler at 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. R./
Examiner, Art Unit 3744
10/13/2009

/Frantz F. Jules/

Supervisory Patent Examiner, Art Unit 3744